

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended): A method of making a
conductive layer on a substrate, a surface of the
5 substrate comprising a first area and a second area,
the method comprising:

forming at least one conductive layer on the first
area and on the second area, respectively;

forming a first dielectric layer on the surface of
10 the substrate that covers each conductive layer;

removing portions of the first dielectric layer to
define at least one first opening in the first dielectric
layer, and using the first dielectric layer as a mask
to remove portions of the conductive layer underneath
15 the first opening in the first area until the remaining
conductive layer in the first area is of a predetermined
thickness; and

removing portions of the first dielectric layer in
the second area until reaching the top surface of the
20 conductive layer.

Claim 2 (Original): The method of claim 1 wherein the
substrate is a silicon substrate.

25 Claim 3 (Original): The method of claim 1 wherein the
surface of the substrate further comprises at least
one second dielectric layer and at least one conductor
disposed in the second dielectric layer.

30 Claim 4 (Original): The method of claim 3 wherein the
conductor comprises a conductive plug, a metal line,
a metal interconnection or a dual damascence structure

conductor.

Claim 5 (Original): The method of claim 3 wherein the material composition of the conductor comprises tungsten (W), copper (Cu), aluminum (Al), aluminum-copper-alloy or other conductive material.

Claim 6 (Canceled)

6 10 Claim 7 (Original): The method of claim 1 wherein a deposition process is executed to form a third dielectric layer on the surface of the substrate so as to cover the first dielectric layer and the conductive layer in the first area before removing portions of the first dielectric layer in the second area.

7 Claim 8 (Original): The method of claim 7 wherein the method for removing portions of the first dielectric layer in the second area comprises:

20 performing a second photo-etching-process to form at least one second opening down to the top surface of the conductive layer in the third dielectric layer and the first dielectric layer in the second area.

8 25 Claim 9 (Original): The method of claim 7 wherein the third dielectric layer is a transparent layer.

9 Claim 10 (Original): The method of claim 1 wherein the thickness of the conductive layer is approximately 12kÅ, and the predetermined thickness is approximately 5kÅ.

10 Claim 11 (Original): The method of claim 1 wherein the

material composition of the conductive layer comprises tungsten (W), copper (Cu), aluminum (Al), aluminum-copper-alloy or other conductive material.

115 ~~Claim 12~~ (Original): The method of claim 1 wherein the first area is a fuse area and the conductive layer in the first area is utilized as a fuse, the second area is a bonding pad area and the conductive layer in the second area is utilized as a bonding pad.

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12 ~~Claim 13~~ (Original): The method of claim 1 wherein the first area is a core circuit area and the second area is a periphery circuit area, the conductive layers in the first area and the second area are utilized as metal
15 lines.

13 ~~Claim 14~~ (Original): A method of making a fuse, the method comprising:

20 providing a semiconductor substrate, a surface of the semiconductor substrate defined with a first area and a second area;

forming a first dielectric layer on the surface of the semiconductor substrate;

25 forming at least one first conductive layer and at least one second conductive layer on the first dielectric layer in the first area and in the second area, respectively;

30 forming a second dielectric layer on the surface of the first dielectric layer to cover each conductive layer;

performing a first photo-etching-process to form at least one first opening down to the top surface of

the first conductive layer in the second dielectric layer in the first area;

removing portions of the first conductive layer underneath the first opening so the remaining first
5 conductive layer is of a predetermined thickness and is utilized as the fuse;

forming a third dielectric layer on the surface of the semiconductor substrate; and

performing a second photo-etching-process to form
10 at least one second opening down to the top surface of the second metal layer in the second dielectric layer in the second area.

~~14~~ Claim 15 (Original): The method of claim 14 wherein
15 the semiconductor substrate is a silicon substrate.

~~15~~ Claim 16 (Original): The method of claim 14 wherein the surface of the semiconductor substrate further comprises at least one fourth dielectric layer and at
20 least one conductor disposed in the fourth dielectric layer.

~~16~~ Claim 17 (Original): The method of claim 16 wherein the conductor comprises a conductive plug, a metalline,
25 a metal interconnection or a dual damascence structure conductor.

~~17~~ Claim 18 (Original): The method of claim 14 wherein the first dielectric layer further comprises a
30 plurality of conductive plugs.

~~18~~ Claim 19 (Original): The method of claim 18 wherein

the method for forming each conductive plug further comprises the following steps:

- performing a first etching process to form a plurality of via holes in the first dielectric layer;
- 5 and
- forming a metal layer in the via holes, the metal layer filling the via holes.

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10 Claim 20 (Original): The method of claim 14 wherein each conductive layer is an aluminum layer formed by a DC magnetron sputtering process and an etching process, and the third dielectric layer is a silicon oxide layer with a thickness of approximately 1kÅ.